



**SOUTH COAST
WATER DISTRICT**
Partnering With The Community

August 31, 2023

The Honorable Maria Hernandez
Presiding Judge of the Superior Court
700 Civic Center Drive West
Santa Ana, CA 92701

SUBJECT: South Coast Water District Responses to the Orange County Grand Jury Report
– *Historic Rain, Yet Drought Remains* - Findings and Recommendations

Dear Judge Hernandez,

Enclosed are the South Coast Water District's (SCWD) responses to the Findings (F1 -F12) and Recommendations (R2 and R4) of the 2022-2023 Grand Jury Report – *Historic Rain, Yet Drought Remains*. SCWD acknowledges and appreciates the time and effort that the OC Grand Jury put into analyzing the complexities and nuances of water resources in Orange County.

In summary, SCWD agrees that South Orange County faces a future where drought may be the norm. As such, it is critical that new water supply projects, including but not limited to desalinated ocean water, be explored and adopted where feasible. SCWD also agrees that a strong communication strategy is necessary to ensure that the public is aware of the challenges that a drier climate presents, the measures necessary to conserve water, and the need to secure additional water resources. As with any industry, the speed of projects coming online can be improved, but local water agencies and the State are working diligently to ensure that projects intended to provide new/recycled water resources and conserve more water continue to be implemented and that our communities become less reliant on imported water.

FINDINGS

F1 - Future water supplies are impacted by climate change and current supplies will not meet future demands.

Response: AGREE

SCWD agrees that projected drier weather will make it increasingly difficult to reliably meet future water demands. Future water demands may be further stressed by population densification and decreasing water allocations from the State Water Project and the Colorado River Aqueduct. As such, SCWD is actively working, and has been for decades, to expand locally available water resources to the extent possible by expanding our recycled water distribution network and converting potable irrigation users to recycled water, with a target

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of recycling 100% of the sewage that SCWD annually flows into the Coastal Wastewater Treatment Plant. In accordance with the SCWD Integrated Water Resources Plan, SCWD is also working to continue the responsible, increased production of treated brackish groundwater supplies from the San Juan Basin up to SCWD's permitted rights, while complying with the Basin's adaptive pumping management (APM) program. Additionally, SCWD is working to add desalinated ocean water, a drought-resistant water supply, to our supplies through the Doheny Ocean Desalination Project.

F2 - Climatologists predict future extended periods of low moisture with occasional wet years.

Response: AGREE

SCWD agrees with this finding based on information we track from NOAA's Climate Prediction Center, the National Integrated Drought Information System, and observable weather patterns. The 2022-2023 winter is an example of this pattern – while this past winter was a wet one, recent years have been very dry with minimal precipitation. A wet year appears to be an anomaly, not the norm.

F3 - Climate change is inevitable and is exacerbated by human behavior.

Response: AGREE

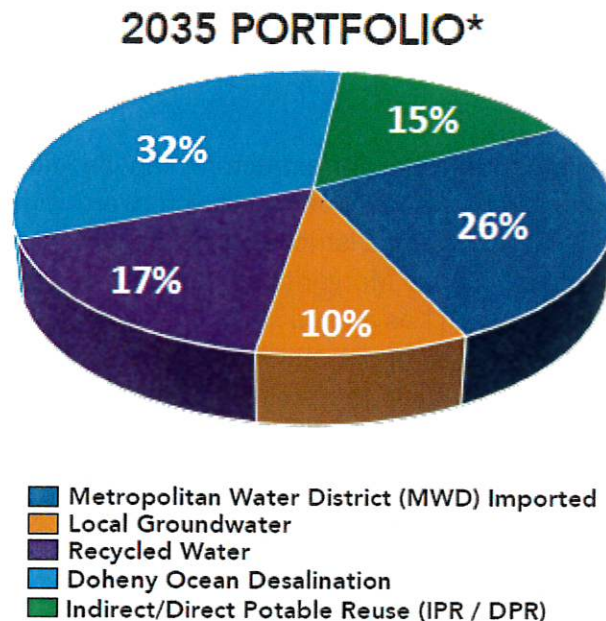
Wholesale water suppliers to the Orange County region, including Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC), are consistently studying and analyzing climate change impacts to our water supplies. Scientists have found that burning fossil fuels, deforestation, land development, and other human activities have an impact on global warming. Climate change presents a very real challenge to water agencies. For example, climate change has resulted in extended periods of drought and has also led to sea level rise, which has caused erosion along our coastlines. SCWD is working to adapt to this new reality in several ways. For example, SCWD continues to promote water conservation as a way of life through programs such as “Water Saver of the Month” which recognizes residents who take steps to consistently conserve water in a discernable manner. SCWD will also be evaluating the feasibility of relocating one of its most vulnerable sewer lift stations to prevent potential issues caused by sea level rise and coastal erosion. Lastly, SCWD has adapted to climate change by moving forward with the Doheny Ocean Desalination facility and by modifying its design so that the treatment plant is located at a higher elevation to comply with future sea level rise and flood risk projections. Doheny Ocean Desalination will provide a new, drought-proof supply to adapt to this drier reality and is planning to be 100% carbon neutral, as approved by the SCWD Board in 2019.

F4 - South Orange County relies primarily on the importation of water.

Response: AGREE

SCWD agrees with this finding. On an annual average, 85-90% of SCWD’s potable water is supplied by MWD. SCWD’s total water supply portfolio is made up of 73% imported water, 14% recycled water, and 13% groundwater. SCWD is actively seeking to decrease our reliance on imported water by increasing the use of recycled water and pursuing other local water sources such as the proposed Doheny Ocean Desalination project. This facility will provide a regional solution that will reduce dependence on imported water, initially producing up to 5 Million Gallons per Day (MGD) for SCWD customers and for other South Orange County water agencies that wish to partner with SCWD on the Doheny Project. The Doheny Desalination project has the potential to eventually be scaled up to 15 MGD, thereby significantly reducing SCWD’s and south Orange County’s reliance on imported water. Partnerships may also extend beyond South Orange County borders as partnerships (via “paper” water transfers) with water agencies outside of Orange County are also being explored.

By 2035, SCWD’s water supply portfolio will look as follows with the 5 MGD capacity that the Doheny Ocean Desalination plant has been approved for and with additional water sources such as indirect and direct potable reuse:



As shown above, SCWD plans to produce 74% of its water supply locally by 2035 through increased and new water sources and will only import 26% of its water supply.

F5 - Local water suppliers recognize that enhanced stormwater capture and storage, wastewater recycling, and infrastructure improvements will not be sufficient to address the long-term forecast of drought and its effects on supply.

Response: AGREE

SCWD agrees with this finding. SCWD, as well as many other Orange County water agencies, relies on MWD and MWDOC for integrated water resources and reliability planning services. Despite the challenges that the long-term forecast of drought presents, SCWD continues to work diligently to increase our water supplies and has been successful in implementing recycled water, conservation, and resiliency projects with the aid of a strong legislative and grants team. We have consultants on board who are familiar with our projects and needs and who help us actively pursue Federal and State funding available to us to secure a wider array of water supplies in the future.

Another potential source of water not mentioned in the OC Grand Jury's Finding F5 above is Indirect Potable Reuse (IPR) and Direct Potable Reuse (DPR). Though DPR is not yet approved, the State Water Board's Division of Drinking Water is currently carrying out a series of legislative mandates regarding DPR and several agencies in Orange County have potential DPR projects in the offing. SCWD recognizes that a diminished water supply in the future requires that we become less reliant on imported water and increase our access to local water supplies, so it is the District's intention to incorporate IPR and/or DPR to its water portfolio, with the goal of having IPR and/or DPR compose approximately 15% of our total water portfolio by 2035.

F6 - There is significant infrastructure planning, but inadequate implementation.

Response: PARTIALLY AGREE

SCWD agrees that implementation of infrastructure can be difficult, but despite the various challenges, water agencies continue to move forward with projects at the local level. For example, Irvine Ranch Water District secured rights to the Kern River Basin for water storage, and in 2020, Santa Margarita Water District completed the Trampas Canyon Dam and Reservoir, which has a capacity of 1.6 billion gallons of recycled water. SCWD has also already obtained all of the major required permits for the Doheny Ocean Desalination Plant, we are currently in the process of selecting a Design-Build-Operate-Maintain (DBOM) team, and the plant should be operational by 2028. SCWD is simultaneously working on expanding our recycled water system through the Coastal Recycled Water Expansion Program, which is a collection of prioritized and phased projects that will convert up to 40 existing potable irrigation sites to recycled water resulting in 114 million gallons of annual potable water use savings once completed. Of the projects in our Coastal Recycled Water Expansion Program, one is currently in construction, one is currently in design, and one is currently in the pre-design phase. SCWD continues to convert existing potable water irrigation services to recycled water as the infrastructure allows for this and anticipates full program completion by 2035.

F7 - The review and approval process for major water capital projects is cumbersome and overly restrictive.

Response: PARTIALLY AGREE

SCWD agrees that the review and approval process can be challenging; while acknowledging that we have had a positive experience working with regulatory bodies on acquiring the necessary approvals for the Doheny Ocean Desalination Project. We believe that the State and California Coastal Commission, to name two critical agencies, also recognize the dire need for additional water sources and are making changes to facilitate the process of completing capital projects. For example, in August 2022, the State unveiled a new water strategy aimed to increase water resources by creating additional water storage and expediting recycled and desalinated water projects. The State's strategy report outlines the State's implementation steps, some of which include making greater investments in multiple water projects (e.g. recycled water, groundwater recharge, etc.) and issuing grants to local agencies for planning and building desalination projects. The plan also calls on the State Water Board to convene a strike team to identify and resolve permitting and funding obstacles and calls on multiple State entities (e.g. California Coastal Commission, State Lands Commission, State Water Board, etc.) to develop criteria for siting of desalination facilities along the California coast and to recommend new standards to facilitate approval. Since the State revealed its strategy, two potential desalination projects have been approved by the California Coastal Commission – the Doheny Project and the Monterey Bay project.

F8 - Failing to find solutions to water shortages will have a significant impact on the Orange County economy.

Response: AGREE

SCWD agrees with this finding. Should a natural disaster occur that prevents water from reaching the south Orange County area, which is highly dependent on imported water, both homes and businesses may have limited access to water. In addition to providing water for approximately 35,000 residents, SCWD currently provides water to approximately 1,000 businesses and over 2 million visitors annually. SCWD recognizes the need to help sustain the local economy, and in response we have worked with several hotels within our service area to convert their irrigation systems to recycled water irrigation to help them conserve water while simultaneously helping them maintain their facilities at their desired standard. SCWD is also expanding its recycled water infrastructure so that more parts of our service area, including more businesses, have access to this water supply. With the addition of desalinated water from the Doheny Plant to SCWD's portfolio, the District's customers, including businesses, will be better insulated from the negative impacts that water shortages, either caused by climate change or by unexpected disasters, could have on them. By 2035, SCWD aims to import only 26% of its water supply from MET and 74% of its water supply will be produced locally.

F9 - Continued development in Orange County creates additional water supply needs.

Response: AGREE

SCWD agrees that continued development creates an additional need for water supply, although our service area is mostly built out, with very few areas left for development. On average, residential customers in SCWD's service area use 10 CCF of water monthly. New customers and/or businesses means that more water is necessary to fulfill demand.

F10 - *Conservation and efficient use of water is essential.*

Response: AGREE

SCWD agrees that conservation and efficient use of water are essential. As such, despite the rainy winter season this year, we continue to encourage conservation and efficient water use. SCWD has a "Water Saver of the Month" program which recognizes customers who have made a tangible contribution to conserving potable water, a "Water Hero" program which recognizes businesses and other groups that complete water-saving projects, rebate programs for turf removal and installation of high-efficiency appliances, and other programs. Moreover, SCWD has found that customers typically continue to practice water-saving methods once they are accustomed to them, even if stricter requirements are no longer in effect. Having a strong conservation program has long-lasting effects on customers' water usage.

F11 - *Increased outreach and public education is necessary.*

Response: AGREE

SCWD agrees that public engagement and education are key components to building support for critical projects and programs implemented for our ratepayers' benefit. We would not be here if it were not for our community, so we take our partnership with them very seriously. Transparency into how SCWD is building resiliency is a big part of that. As such, we are very active in the community by attending local events, speaking with the community, providing conservation resources, meeting with local officials, and either hosting information sessions or attending Non-Governmental Organization meetings for projects like the Doheny Ocean Desal Project to keep residents informed at every step of the way.

F12 - *Desalination has proven to be technologically and environmentally feasible and is slowly being embraced as a drought-resistant source of water.*

Response: AGREE

SCWD agrees with this finding. Desalination projects are being embraced as a new, drought-resistant, local source of water as proven by the California Coastal Commission's recent approval of the Doheny Ocean Desalination Plant and a desalination plant in Monterey Bay. The Doheny Project has a favorable set of circumstances to make it technologically and environmentally feasible. Specifically, the location has the geology suitable for slant well technology, it is located next to a treatment plant with an existing two-mile long outfall for discharge, and it already has much of the underground

infrastructure necessary to transport water to our customers and neighbors. For these reasons, the planning of the Doheny Ocean Desalination project has been endorsed by the SCWD Board and some neighboring agencies (and inland agencies for potential paper transfers) who are working to potentially partner on the Doheny project, as agencies recognize that this project will provide a new regional supply that benefits all of South Orange County.

RECOMMENDATIONS

R2 - Orange County water agencies should expedite the planning, development, and construction of desalination plants over the next five years to insure a sustainable and reliable drought-resistant source of water.

Response: AGREE, IN PROGRESS

SCWD agrees that desalination projects should be expedited where it makes sense. As previously stated, our Doheny Project is very conveniently situated for a desalination plant and provides a regional solution to water shortages resulting from ongoing drought as well as reducing South Orange County's reliance on imported water. SCWD is currently seeking partnerships with local and inland agencies that may not have sites that are as conducive to this type of project. Local agencies in South Orange County can also benefit significantly from this project during a catastrophic imported water outage from MWD. This is a partnership model that could potentially be replicated by other agencies with the appropriate set of conditions to build desalination plants so that more agencies have access to this new and reliable water source. The Doheny Project is expected to be complete by 2028.

R4 - Orange County water agencies should update their public communication strategies, by calendar year end 2023, to inform the public of lifestyle changes if additional water sources are not developed.

Response: AGREE, ONGOING

SCWD is in agreement that the public should be informed of lifestyle changes required should additional water sources not be developed. SCWD also believes that our communications strategies should be reviewed and updated regularly regardless of the status of water resources. As such, the District will continue reviewing and updating its communication strategy periodically and we will continue educating and engaging the public on conservation efforts and permanent lifestyle changes using various social media platforms, bill inserts, a monthly newsletter, community events, and other communication methods. SCWD has also spent significant time educating the public on the need for additional water sources which go hand in hand with permanent lifestyle changes. For example, SCWD has educated and worked with local hotels and homeowner associations to help them make the switch to recycled water irrigation which creates permanent potable water savings in our service area. The District also continues to engage our

customers to inform them of the benefits that the desalinated water from the Doheny Plant will bring to our region, including the fact that it is a reliable and drought-resistant new source of water. SCWD will continue with its current communication strategy as it has proven to be effective in garnering support for different water projects thus far and will continue periodically revising it to ensure messaging is still effective in helping the District meet its goals.

In conclusion, SCWD recognizes the need for securing additional water resources in the face of the forecasted long-term drought conditions. One of SCWD's goals is to become less reliant on imported water and we have embarked on some very significant projects to achieve this goal, including the Doheny Ocean Desalination Project which will have a significant impact on SCWD's customers. The Doheny Ocean Desalination Project will also benefit the South Orange County region as a whole and has the potential to expand well beyond the South Orange County area, especially if the plant is expanded to its maximum capacity of 15 MGD. SCWD will continue to work diligently to secure a more drought-resistant future by enforcing a strong communication strategy where conservation is one of the main focuses, securing funding for additional water projects whenever possible, and working closely with different governing bodies and stakeholders to make water projects a reality in south Orange County.

Sincerely,

Douglas Erdman

**Douglas
Erdman**

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Doug Erdman
Board President, South Coast Water District